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ABSTRACT

This study examines patterns of enrollment of black undergraduate students in 19 States affected by Adams-Califano litigation and rulings related to desegregation of higher education systems. The purpose of the research was to ascertain the degree of general participation of black undergraduates in higher education and to identify trends toward increase or decrease in this participation. Increases in participation of black students in areas where they are traditionally underrepresented are documented, and correlates for variability in participation rates are identified. The core of the data for the research was formed from the 1976 and 1978 enrollment tapes of the Higher Education General Information Survey. Data indicate that black enrollment in white colleges increased, while enrollment in black colleges decreased. Statewide participation rates and high parity rates were found to be related to geographical location of the State, black family income, the presence or absence of black colleges, and the number of white regional State colleges in the State. Tables of data are included. (Author/MK)

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Recent College and University Enrollment Patterns Of Black Students in States Affected By Adams-Califano Litigation

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FOREWORD

The Southern Education Foundation and the family philanthropies which preceded it have had a special and continuing interest in the education of black Americans for more than a hundred years. The Foundation has been particularly concerned with programs aimed at increasing and improving higher education opportunities for blacks in the South.

In April, 1974, the SEF Board of Directors established an in-house project, the Higher Education Program, to address issues which were surfacing as a result of the then Adams v. Richardson case. Under this higher education component, the Foundation supported coalitions formed by citizens to monitor state desegregation plans, sponsored conferences and workshops, published papers, monographs and documents, and awarded general grants which focused specifically on achieving equity in higher education in the ten states affected by the Adams case.

In September, 1978, the Higher Education Program proposed concentrating a major portion of its allocation on a Research Task Force which was formed to plan a research agenda for the Foundation and to commission research projects. This body of seven educators has commissioned ten studies since its inception; this document is presented as the second of the research efforts. The first report, A STUDY OF TITLE III IMPACT ON HISTORICALLY

BLACK INSTITUTIONS, written by Dr. Cameron Fincher, Institute of Higher Education, University of Georgia, is available to the public at no cost.

Copies of this report and subsequent publications will be available at a cost of $3.00 each.

Southern Education Foundation
811 Cypress Street, N.E.
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RECENT COLLEGE AND UNIVERSITY ENROLLMENT PATTERNS OF BLACK STUDENTS IN STATES AFFECTED BY ADAMS - CALIFANO LITIGATION

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A Report of Research Completed

Under A Grant From the Southern

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RECENT COLLEGE AND UNIVERSITY ENROLLMENT PATTERNS OF BLACK STUDENTS IN STATES AFFECTED BY ADAMS - CALIFANO LITIGATION

Introduction

This study examined enrollment patterns of black undergraduate students in 19 states affected by Adams-Califano court litigation and rulings. The general purpose of the research was to ascertain the general degree of participation of black undergraduate students in the higher education enterprise in these states and to identify trends toward increases or decreases in this participation. A further purpose was to identify trends toward a broader participation of black undergraduate students in the higher education enterprise on formerly segregated white campuses. Much of the Adams-Califano litigation relates to participation as defined in these purposes.

Correlatives of the main themes in the research included an analysis of participation by type of college, i.e., two-year and four-year and participation by institutional control, i.e., public and private. Also, analyses of black participation in selected fields of study in all of the contexts described above. Attempts to identify correlates of enrollment patterns were also made and general comparisons of data with national norms and trends were interspersed at selected points in the analyses.

Data for the study included statistics spanning a period of four years (1974-1978) but the main core of the study involved data for the opening fall enrollments of 1976 and 1978. The main

source of data was the Higher Education General Information Survey for these years. These data are gathered annually by the National Center for Education Statistics and data on enrollment by race are included on a bi-annual basis. Data for the racial surveys were gathered in the earlier years by the Office of Civil Rights of the Department of Health, Education and Welfare. The service was shifted to the National Center for Educational Statistics in 1976. The format was also changed at the time of the shifts resulting in two surveys (1976 and 1978) with the identical formats necessary for trend analyses. Data for the 1974 survey were used as baseline material for selected analyses along with national norms data from the Digest of Education Statistics published annually by the National Center for Education Statistics. Projections of Education Statistics published by the same agency along with selected material from a variety of sources was also used.

Adams-Califano Litigation

In 1969, the Office of Civil Rights of the Department of Health, Education and Welfare determined that ten states were continuing to operate segregated higher education systems in violation of Title VI of the Civil Rights Act of 1964. The states were notified of this finding and were requested to submit corrective plans. Most of the states failed to submit plans and those which did submit plans forwarded documents which were found to be unacceptable by the Office. No administrative action was taken by the Office in the face of this failure to respond to the requests for corrective action.

In 1970 a lawsuit was initiated to require the Department of Health Education and Welfare to take action to enforce the provisions of Title VI of the Civil Rights Act of 1964 where these states were concerned. The litigation evolved as the Adams-Califano case after the original litigant and a Secretary of Health Education and Welfare, Joseph Califano, who was named as the defendent. The first name for the case was Adams vs Richardson. Elliot Richardson was Secretary of Health Education and Welfare at the time of the filing of the original suit.

In the final ruling issued in 1977, the United States District Court for the District of Columbia ruled that results from a 1973 ruling and Court order fell far short of acceptability, particularly in the case of six states. The Court ordered the Department of Health Education and Welfare to develop specific criteria to guide the six states in the preparation of comprehensive desegration plans and time-tables. These criteria and guidelines were developed and the Department is now working with these six states under five year plans to implement desegregation of their higher education systems. It has broadened this operation by soliciting five year plans from other states "which are found to have a duty to eliminate the vestiges of duality in their systems of higher education" (Federal Register, February 15, 1978). In the final analysis, the Adams-Califano litigation will have involved some effort at desegregation on the part of all 19 states which operate black college or universities. These include all of the 11 states in the South, the border states of Oklahoma, Missouri, Kentucky, West Virginia, Delaware and Maryland and the Northern

states of Ohio and Pennsylvania. Selected elements of the NEW guidelines follow:

-- The mission of each black institution in the system of the affected states is to be defined.

-- Steps to strengthen the role of black institutions in the state systems are to be specified.

-- Unnecessary program duplication between black and white campuses is to be eliminated.

-- States are to give priority consideration to placing new degree programs at black institutions.

-- States are to adopt a goal for equalization of proportions of black students entering two and four-year institutions in the systems, i.e., the proportions of black students in each type of institution in the system shall be equal to the proportions of white students similarly enrolled.

-- States are to adopt the goal that there shall be an annual increase in black enrollment in the formerly white four-year institutions in the systems as a whole and in each such institution in the systems.

-- States are to adopt a goal for equalizing the number of black and white graduates from the state systems.

-- States are to adopt a goal of increasing the proportion of white students on black campuses.

-- States are to adopt the goal of equalizing the proportions of blacks and whites on governing boards, faculties and administrative staffs.

The Court ruling and attendant orders were handed down on April 1, 1977 with specific orders to the Department of Health Education and Welfare to develop the guidelines within 90 days. This was done and the final guidelines were published in the Federal Register on February 15, 1978 (pp. 6658-6664). They were forwarded to the institutions in July of 1977 with a target date for the beginning of the Five Year Plan of September 1, 1977.

The context of the present study is thus protracted litigation regarding racial participation in the higher education

enterprise in 19 states. The core data for the study encompasses opening fall enrollment for the year preceding the final court order for comprehensive desegregation plans (1976) and for the year following the issuance of the order (1978). The first set of data (1976) can serve as baseline for analyses in later years, both in the present and in future studies. The second set of data (1978) can serve as first bench mark of a sort in efforts to measure progress toward greater participation of black students in higher education in these states and a broader participation on campuses and in programs than has previously been the case.

Specifically, the study addresses, and is limited to, goals related to the increases of black participation, equalization of participation rates of blacks and whites and increases of black students on formerly white campuses. The fifth and sixth goals outlined above are thus addressed. Again, the study is limited to participation of undergraduate students. Again, some data for the time frame 1974-1978 are used while the basic core data cover the years of 1976 and 1978. Further, while Adams-Califano litigation relates to public systems of higher education, the present study has also included data for private institutions in the affected states. This was done to present a comprehensive scenario.

Organization of the Study

Following the introductory passages of the report, data, text and tables are presented to describe rates of participation of undergraduate black students in higher education in 1976 in the 19 states involved in the study. Rates of participation are presented as totals for the states involved, and as disaggregations

according to type, control and racial designation of the institutions. Participation of black students in selected programs of study is analyzed and selected comparisons of participation rates with national norms and national rates are also made. States in the study with high and low rates of participation are identified.

Data, text and tables for 1978 are then presented and an attempt is made to identify selected changes in participation rates. Data for 1974 are considered at this point for historical context.

Finally, regression equations are developed for the data in an attempt to identify correlates of participation rates of black students in the states, in four-year white colleges and correlates of state parity indexes of overall effort at assuring black participation in higher education. A summary and suggestions for further study are included along with appendix tables. The terms participation and enrollment are used interchangeably in the discussion. Black students is a term sometimes used to describe participation and the term refers in all cases to black undergraduate students.

Black Undergraduate Enrollment: 1976

In 1976, 459,012 black undergraduate students were enrolled in colleges and universities in Adams-Califano states. Of this total, 452,795 were in institutions classified by race and were used as the core data for these analyses. The remainder (6,217 students) were enrolled in institutions uncoded for race.

The students were enrolled in 1335 institutions in the 19 states. The National Center for Education Statistics codings indicated that 120 of these institutions were classified as black and

that 1215 were classified as white. Institutions were classified as black or white for the 1976 codings when half or more of their total enrollments are black or white.

The black colleges in the group consisted of 102 of the 104 black colleges and universities founded just before or immediately after the Civil War. They also included 16 institutions, mostly two-year, which were established in recent years and which enrolled large numbers of black students. Most were located in large black communities. All black colleges and universities have always been open to all races.

The white colleges in the group included some institutions established in colonial times. Most of the public institutions in the group were located in states where black students were prohibited from enrollment by law. These laws were declared unconstitutional in 1954 by Supreme Court rulings but enrollment of black students in the years following these rulings has proceeded at a slow pace. Private institutions, with notable exceptions, followed their state counterparts in these states although state laws as a whole were less explicit on the subject of black students where white private institutions were concerned.

The 1335 institutions in the group represented 44 percent of the 3055 institutions in the country at the time of the study. They enrolled 4,254,925 students or 38 percent of the 11,012,137 students enrolled in the country at that time.

The 459,012 black undergraduate students enrolled represented 13.8 percent of the total undergraduate enrollment (3,270,378) in the 19 states. This figure also represented 43 percent of the 1,034,680 black students enrolled in the nation in 1976 (Center

for Education Statistics, 1976, p. 93). See Appendix Table for total national black enrollment by Census region.

The largest enrollment of black students was found in white two-year colleges where 157,792 students were recorded. This was followed by black four-year colleges with 149,651 students, white four-year schools with 136,956 and black two-year institutions with 8,396 students. Another 6,217 students were in uncoded colleges, see Table 1.

Texas enrolled 53,043 students leading the list of states in enrollment unadjusted for proportion of black people in the population while Delaware enrolled 2,425 black students and ranked last in this category. Again, these figures are not adjusted for percent of black population in the state. This will follow in subsequent analyses.

General Black Participation Rates

The data indicate that general black participation rates for black students in Adams-Califano states left something to be desired. While black people represented 16.7 percent of the population in the 19 states (U.S. Census Bureau, 1976) in 1976, the data from this study indicate that they represented only 13.8 percent of the total undergraduate enrollment. Parity in participation would have required some 546,153 black enrollees in these states for that year.

Public-Private Enrollment

A large majority of the students were enrolled in public institutions (Tables 2 and 3). Of 452,795 blacks used for the core analysis in the study, 368,326 or 85 percent were enrolled in public institutions. All of the 6,217 students in uncoded colleges were

Table 1

Enrollment of Black Students in Adams-Califano States by College Type: Public and Private Institutions 1976

ALL FIELDS

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	452,795	8,396	149,651	157,792	136,956
Alabama	28,381	1,315	13,840	6,754	6,472
Arkansas	8,967	189	2,971	917	4,890
Delaware	2,425	-	1,183	631	611
Florida	34,626	-	6,120	20,897	7,609
Georgia	24,411	-	12,463	4,650	7,298
Kentucky	8,391	-	1,284	2,321	4,786
Louisiana	32,022	973	16,992	3,707	10,350
Maryland	31,329	-	8,395	15,912	7,022
Mississippi	24,951	3,127	13,137	5,183	3,504
Missouri	15,227	-	821	6,919	7,487
North Carolina	42,003	2,063	19,438	15,272	5,230
Ohio	39,376	-	2,768	15,488	21,120
Oklahoma	8,409	-	989	3,518	3,902
Pennsylvania	25,321	-	2,939	9,750	12,632
South Carolina	22,354	-	7,892	9,860	4,602
Tennessee	22,715	173	7,881	6,474	8,187
Texas	53,043	317	14,643	23,401	15,682
Virginia	25,819	239	15,114	6,756	3,710
West Virginia	3,025	-	781	382	1,862

Note: An additional 6,217 students were enrolled in colleges uncoded by race.

Table 2

Enrollment of Black Students in Adams-Califano States by College Type: Public Institutions 1976

ALL FIELDS

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	368,326	6,703	103,708	150,822	107,093
Alabama	19,196	1,315	5,933	5,983	5,965
Arkansas	7,529	-	2,521	881	4,127
Delaware	1,925	-	1,183	303	439
Florida	29,815	-	4,375	20,886	4,554
Georgia	16,477	-	5,622	4,243	6,412
Kentucky	7,680	-	1,284	2,213	4,183
Louisiana	28,589	973	14,289	3,707	9,620
Maryland	29,607	-	8,395	14,893	6,319
Mississippi	22,027	2,352	11,381	5,155	3,139
Missouri	12,146	-	821	6,863	4,462
North Carolina	33,080	2,063	13,176	14,263	3,578
Ohio	31,812	-	1,699	14,706	15,407
Oklahoma	7,673	-	989	3,261	3,423
Pennsylvania	19,198	-	2,939	8,974	7,285
South Carolina	15,718	-	2,894	9,136	3,688
Tennessee	17,291	-	4,091	6,292	6,908
Texas	45,666	-	10,379	22,307	12,980
Virginia	20,320	-	10,756	6,509	3,055
West Virginia	2,577	-	781	247	1,549

Table 3

Enrollment of Black Students in Adams-Califano States by College Type: Private Institutions 1976

ALL FIELDS

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	84,469	1,693	45,943	6,970	29,863
Alabama	9,185	-	7,907	771	507
Arkansas	1,438	189	450	36	763
Delaware	500	-	-	328	172
Florida	4,811	-	1,745	11	3,055
Georgia	7,934	-	6,641	407	886
Kentucky	711	-	-	108	603
Louisiana	3,433	-	2,703	-	730
Maryland	1,[illegible]2	-	-	1,0[illegible]	703
Mississippi	2,924	775	1,756	28	365
Missouri	3,081	-	-	56	3,025
North Carolina	8,923	-	6,262	1,009	1,652
Ohio	7,564	-	1,069	782	5,713
Oklahoma	736	-	-	257	479
Pennsylvania	6,123	-	-	776	5,347
South Carolina	6,636	-	4,998	724	914
Tennessee	5,424	173	3,790	182	1,279
Texas	7,377	317	4,264	94	2,702
Virginia	5,499	239	4,358	247	[illegible]55
West Virginia	448	-	-	135	313

in public institutions. This rate of participation in public higher education is some ten percent higher than national averages for such participation. Enrollment ratios for public and private institutions have remained steady at 3:1 for the last decade or so. The ratio exceeds 5:1 for the present study.

Enrollment in white two-year public colleges leads the list of enrollments for the sample with 150,822. Black two-year public colleges and white two-year private colleges enrolled 6,703 and 6,970 students respectively and ranked last among the eight types of institutions analyzed.

Enrollment of black undergraduate students in white four-year public institutions in the states exceeded enrollment in black four-year colleges in 1976 by some 4,000 students (107,093 to 103,708). Most of this was accounted for, however, by enrollment in Northern states such as Ohio where enrollment of black students in white four-year institutions was 14 times the enrollment of such students in the single black four-year college. North Carolina, for example, enrolled four times more black students in its black four-year colleges and Virginia and Mississippi enrolled three times more.

States where black enrollment in white four-year public colleges equaled or exceeded black enrollment in black four-year public colleges included Arkansas, Florida, Georgia, Kentucky, Missouri, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas and West Virginia, 11 of the 19 states.

Enrollment of black students in private four-year colleges in the states for 1976 presented an opposite picture. Enrollment in black four-year colleges was nearly double the enrollment in white four-year colleges, 45,943 to 29,863. This was true in the

face of the absence of a black four-year private college in seven of the states in the study. Ohio and Pennsylvania led the list of states for black enrollment in private four-year institutions with 5,000 and more students followed by Missouri, Florida and Texas, each enrolled at a rate near or exceeding 3,000 black students.

General Public and Private College Participation Rates

The data indicate a larger concentration of black students in public institutions in the states than is the case for American colleges students as a whole. Again, the national ratio is on the order of 3:1 in favor of enrollment in public institutions while black students in this study showed a ratio exceeding 5:1 in favor of public institutions. Suffice it to say that the rates for the states depart from the national rates somewhat and that this departure is in favor of public institutions. The general ratio for the states in the study is on the order of 4:1 in favor of public institutions. The concentration of black students in public institutions is still high, however.

Eleven of the 19 states enrolled black students in white four-year colleges at a rate which equaled or exceeded enrollment of black students in black four-year colleges and the rates for the former exceeded those for the latter when taken as a whole. In the eight states where the opposite obtained, however, the differences in participation rates for these two categories were pronounced.

Enrollment of black students in white public two-year colleges constituted the largest rate of participation for any of the analyses. Participation rates for this type of institution in these states seem more than adequate.

Full-Time Enrollment

Of the 11 million students enrolled in American colleges and universities in 1976, fully a third and more were enrolled on a part-time basis. This rate of part-time enrollment has shown steady growth and the forthcoming Carnegie Commission report entitled 3000 Futures (Carnegie Commission for Policy Studies in Higher Education, 1980) predicts a scenario in the year 2000 where part-time students will constitute half or more of all students enrolled.

Black full-time enrollment for this study exceeded national averages for 1976 and part-time enrollment was the opposite of this rate. Nearly 90 percent of the black students in black four-year public colleges were full-time students and 80 percent of those enrolled in white four-year public colleges were full-time. See Table 4. Only in white public two-year colleges did rates of full-time enrollment drop to national averages. Nearly 60 percent of the black students in these schools were full-time and such a rate approximates the national averages for this type of institution.

Black enrollment in private institutions in the study (Table 5) was largely full-time. Private institutions, nationally, have been slow to develop extension programs, twilight schools and the like and this is reflected in these figures, perhaps. This is changing and more and more of these institutions are tapping the part-time market. States with large percents of black students in black public four-year colleges enrolled as full-time students include Delaware (100 percent), Oklahoma, South Carolina (99 percent), Alabama, Arkansas, North Carolina and Ohio. The states of Delaware, North Carolina and West Virginia led the list for white colleges in this category.

Table 4

Full-Time Black Student Enrollment in Public Colleges in Adams-Califano States in 1976 by Percent

ALL FIELDS

State	Percent Full-Time Black 2-Year	Black 4-Year	White 2-Year	White 4-Year
TOTALS	78.65	89.29	59.26	80.17
Alabama	78.78	96.76	78.46	78.01
Arkansas	-	96.83	78.77	87.06
Delaware	-	100.00	64.36	91.57
Florida	-	93.46	59.71	78.85
Georgia	-	96.24	65.12	70.10
Kentucky	-	92.68	68.69	79.85
Louisiana	86.02	85.36	48.26	82.67
Maryland	-	91.26	38.56	71.78
Mississippi	97.32	82.74	84.05	89.39
Missouri	-	79.42	56.16	76.98
North Carolina	53.81	93.22	71.09	92.23
Ohio	-	93.11	42.48	80.07
Oklahoma	-	96.46	58.72	78.79
Pennsylvania	-	92.48	61.37	79.56
South Carolina	-	99.17	68.93	84.11
Tennessee	-	86.87	72.03	80.08
Texas	-	88.21	58.34	77.85
Virginia	-	82.34	54.03	89.59
West Virginia	-	58.64	62.75	93.54

Table 5

Full-Time Black Student Enrollment in Private Colleges in Adams-Califano States in 1976 by Percent

ALL FIELDS

State	Percent Full-Time Black 2-Year	Black 4-Year	White 2-Year	White 4-Year
TOTALS	97.87	95.84	87.56	83.06
Alabama	-	91.88	94.68	79.29
Arkansas	100.00	88.22	61.11	96.07
Delaware	-	-	80.49	39.53
Florida	-	94.21	90.91	84.39
Georgia	-	97.47	78.13	90.97
Kentucky	-	-	89.81	86.40
Louisiana	-	96.93	-	72.05
Maryland	-	-	93.42	78.66
Mississippi	95.48	97.55	85.71	71.78
Missouri	-	-	87.50	69.32
North Carolina	-	97.75	98.51	84.81
Ohio	-	100.00	82.10	87.10
Oklahoma	-	-	80.54	84.85
Pennsylvania	-	-	67.78	80.89
South Carolina	-	99.81	94.37	85.09
Tennessee	100.00	97.02	92.86	95.93
Texas	99.68	94.00	92.55	82.86
Virginia	100.00	93.78	96.76	93.28
West Virginia	-	-	71.85	87.22

Delaware was lowest in full-time black students on four-year private college campuses with only 39 percent of the enrollees participating on a full time basis. Tennessee led the list in this category with 95 percent of its black students in white four-year private campuses enrolled as full-time students.

General Full-Time Participation Rates

The data for the study indicate a full-time participation rate for the students in this study which exceeds the national average for full-time participation. It must be remembered, however, that the general participation rate was only about 81 percent of parity. One way to consider this situation is to look at a simulated total enrollment where parity existed and where the ratios of part-time to full-time students approached national averages. In such a scenario, some 546,000 black students would have been enrolled; 360,000 of these would have been full-time and 186,000 would have been part-time. Instead, 452,785 students were enrolled; 362,000 or so were full-time and only 90,000 or so were part-time. Policy initiatives to attempt to increase participation rates would thus be fashioned around the need to increase full-time enrollment by 100,000 or so students and to increase part-time enrollment by 160,000 students. Since the analysis was developed on 1976 data, an upward adjustment for both targets would be necessary to account for increases in both full-time and part-time enrollment.

Accounting and reporting for part-time students has not been as accurate over the years as could have been the case. Inaccuracies may have crept into these data in some instances. It is difficult, for example, to believe that all 1183 undergraduate black

students at Delaware's sole black college were full-time students and that no extension classes were offered for part-time students. A check of 1974 enrollment reports indicated that this was essentially the case at that time, however, and a telephone call to the institution bore this out. Part-time status, it seems is a province of students enrolled for graduate and inservice education. Most undergraduates year-in and year-out are enrolled on a full-time basis.

Whatever, these data perhaps point up an essential difference between black participation in the states and participation of students elsewhere. As noted earlier, the part-time student is a wave of the future and this includes undergraduate as well as graduate students. Most of the undergraduate students have some college experience. Every other freshman, for example, leaves college before graduation and 85 percent do so for reasons which have nothing to do with academics. Women get married and move to a job site with their husbands, men stay on in jobs with promise after a summer's work and more. All are candidates for continuing education and more and more institutions are gearing up to tap these markets. Black part-time participation in the states in this study can be substantially improved. Parity in participation rates will depend in part on such an improvement coupled with solid increases in full-time students.

Two-Year and Four-Year Enrollment

The heavy concentration of black students in two-year colleges has been a cause for concern in many quarters. While about a third of all students are enrolled in two-year colleges in America, some

42 percent of all black students are enrolled in two-year schools (National Advisory Committee on Black Higher Education and Black Colleges and Universities, 1979).

Something of the same pattern was apparent in the 19 Adams-Califano states in 1976 (Table 6) with 36 percent of the black students enrolled in two-year colleges. This is a distinct improvement, however, over the 42 percent concentration reported for the nation in the same year by the National Advisory Committee for Black Higher Education. Doubtless the inclusion of states with black four-year colleges accounted for this improvement.

Table 7 offers emphasis for the comment on the importance of black colleges for four-year black enrollment. These schools enrolled a third of all of the black undergraduates in the sample in 1976 and well over half of the enrollment in four-year colleges. Significantly, their enrollment (149,651) represented about 25 percent of the total black enrollment in four-year colleges in the nation for the year of the analysis (1976). They also awarded well over 45 percent of all buccalaureate degrees for that year. Historically, some 75 percent of all black professionals and high achievers have come from these schools. The undergraduate experience on these campuses seems especially nurturing of talent. Whatever, they carry a heavy load in delivery of educational services to their communities and, it must be said, they do this while existing as the most integrated institutions in America. Some ten percent of their students are white and well over 25 percent of the faculty on these campuses is also white.

West Virginia, Arkansas, Louisiana and Georgia led the list of states with high percentages of their black students enrolled

Table 6

Percent of Black Students Enrolled in Two and Four-Year Colleges in Adams-Califano States in 1976

State	All	Percent 2-Year	Percent 4-Year
TOTALS	452,795	36.70	63.30
Alabama	28,381	28.43	71.57
Arkansas	8,967	12.33	87.67
Delaware	2,425	26.02	73.98
Florida	34,626	60.35	39.65
Georgia	24,411	19.05	80.95
Kentucky	8,391	27.66	72.34
Louisiana	32,022	14.61	85.39
Maryland	31,329	50.79	49.21
Mississippi	24,951	33.31	66.69
Missouri	15,227	45.44	54.56
North Carolina	42,003	41.27	58.73
Ohio	39,376	39.33	60.67
Oklahoma	8,409	41,84	58.16
Pennsylvania	25,321	38.51	61.49
South Carolina	22,354	44.11	55.89
Tennessee	22,715	29.26	70.74
Texas	53,043	42.83	57.17
Virginia	25,819	27.09	72.91
West Virginia	3,025	12.63	87.37

Table 7

Four Year College Student Distribution
By Type of Institution

State	Total Enrollment	Black 4-Year	% of Total Enrollment	White 4-Year	% of Total Enrollment	Total 4-Year	% of Total Enrollment
ALL	452,795	149,651	33.1	136,956	30.2	286,607	63.3
Alabama	28,381	13,840	48.8	6,472	22.8	20,312	71.6
Arkansas	8,967	2,971	33.1	4,890	54.5	7,861	87.7
Delaware	2,425	1,183	48.8	611	25.2	1,794	74.0
Florida	34,626	6,120	17.7	7,609	22.0	13,729	39.7
Georgia	24,411	12,463	51.0	7,298	29.9	19,761	80.9
Kentucky	8,391	1,284	15.3	4,786	57.0	6,070	72.3
Louisiana	32,022	16,992	53.1	10,350	32.3	27,342	85.4
Maryland	31,329	8,395	26.8	7,022	22.4	15,417	49.2
Mississippi	24,951	13,137	52.7	3,504	14.0	16,641	66.7
Missouri	15,227	821	5.4	7,487	49.2	8,308	54.6
North Carolina	42,003	19,438	46.3	5,230	12.5	24,668	58.7
Ohio	39,376	2,768	7.0	21,120	53.6	23,888	60.7
Oklahoma	8,409	989	11.8	3,902	46.4	4,891	58.2
Pennsylvania	25,321	2,939	11.6	12,632	49.9	15,571	61.5
South Carolina	22,354	7,892	35.3	4,602	20.6	12,494	55.9
Tennessee	22,715	7,881	34.7	8,187	36.0	16,068	70.7
Texas	53,043	14,643	27.6	15,682	29.6	30,325	57.2
Virginia	25,819	15,114	58.5	3,710	14.4	18,824	72.9
West Virginia	3,025	781	25.8	1,862	61.6	2,643	87.4

in four-year colleges. Florida, Maryland and Missouri, all with extensive two-year college systems, ranked at the bottom of the list of states where enrollment of black students in four-year colleges was concerned.

West Virginia, Arkansas, Missouri, Kentucky and Ohio led the list of states with black enrollments in four-year white colleges. Significantly, most had only a single black four-year college and in the case of West Virginia, part-time white students could actually constitute a majority group on the campus and classify the school as a white college. The same conditions exist for Missouri. The two schools involved (West Virginia State College and Lincoln University) were only classified as black for purposes of this study because full-time FTE enrollment was mostly black. On many lists one (West Virginia) is now carried as a white institution.

General Two-Year and Four-Year Participation

The data indicate room for improvement in four-year college participation for black college students. The rates of participation on four-year campuses are higher than national averages for such participation but lower than the averages for all students (67 percent). Further, black colleges are carrying a lions share of the load in these states. While constituting only 10 percent of the colleges in the states and about 15 percent of those classified as four-year, these schools enroll over half of the four-year enrollment (149,651 students of a total four-year enrollment of 286,607). Many of the black colleges are underfinanced and the burden seems unfair. Further, the choices of programs are

necessarily limited and black students are inadequately served in the process. Broad and effective policy initiatives designed to enroll more black students, to enroll more on both black and white four-year campuses and to perhaps facilitate higher rates of transfer from two to four-year campuses seem desirable under the circumstances.

Black Participation Rates and Black Population

As noted in the analysis on general black participation rates, large enrollments of black students by a state often reflected large populations in the state, and little else, and thus all raw data on enrollment must be adjusted for black population counts. This has been done in Tables 8 and 9.

Nearly 90 million people lived in the 19 Adams-Califano states in 1976 and 16.7 percent of this number were black people. Over 3 million students were enrolled as undergraduates in the colleges and universities but only 13.8 percent of these students were black. In brief, black people represented 16.7 percent of the population but only 13.8 percent of the undergraduate enrollment. A gap on the order of three percentage points (and 87,000 students) is apparent for the year in question. This must be adjusted upwards by at least two points to account for the fact that black youth represent a greater percent of the college age population than black people represent where total population is concerned. While black people constitute about 12 percent of the population in America, black youth represent over 14 percent of the college age population (18-22 yrs. of age).

Table 8

Black Population and Black Students in Adams-Califano States as Percent of Total Population and Total Undergraduate Enrollment: 1976

States	Population	% Black	Undergraduate Enrollment	% Black
TOTALS	89,163	16.7	3,270,378	13.8
Alabama	3,444	27	131,363	21.6
Arkansas	1,923	19	55,546	16.1
Delaware	548	16	24,801	9.7
Florida	6,789	17	284,869	12.1
Georgia	4,590	28	132,938	23.1
Kentucky	3,219	8	103,968	8.0
Louisiana	3,643	31	127,307	25.1
Maryland	3,922	21	161,730	19.3
Mississippi	2,217	38	80,482	31.0
Missouri	4,677	11	171,047	8.9
North Carolina	5,082	23	204,269	20.5
Ohio	10,652	10	357,266	11.0
Oklahoma	2,559	7	120,322	6.9
Pennsylvania	11,794	9	345,986	7.3
South Carolina	2,591	33	102,291	21.8
Tennessee	3,924	17	146,863	15.4
Texas	11,197	14	509,125	10.4
Virginia	4,648	20	151,856	17.0
West Virginia	1,744	4	58,349	5.1

Utilizing comparisons of black population and black enrollment percents as a yardstick, Ohio led the list of states with high participation rates of black undergraduate students. Ten percent of the Ohio population was black in 1976 and 11 percent of the Ohio undergraduate enrollment was black, 110 percent of parity. Ohio was followed by West Virginia with a five percent enrollment from a four percent population; Kentucky with parity at eight percent for each category; Oklahoma with about the same percentages and Maryland and Pennsylvania where percent of population and enrollment were well within two points of each other.

South Carolina led the list of states with very low participation rates. Thirty-three percent of South Carolina's population was black but black students accounted for only 21 percent of the total undergraduate enrollment in the state. Georgia was second on the list of low participants with a 28 percent black population and an 18 percent black enrollment. Mississippi, Louisiana, Alabama, Delaware and Florida followed, all with percents of black population which exceeded black undergraduate enrollment percents by 5-8 percentage points.

It is possible for states to record a high percent of black undergraduate enrollment and still have inadequacies in black participation rates. In these instances, participation rates for both blacks and whites are low and a high percent of black participation can be misleading.

A companion analysis which can be made to lessen the possibility of such an error tests for total rates of participation by comparing rates of participation with total population. Nationally, roughly five percent of the population is enrolled in college (11

million students at all levels and 218 million people). Undergraduate students accounted for 8 million of these students in 1976 and represented 3.8 percent of the total population of 211 million for that year.

Table 9 contains such an analysis for Adams-Califano states. It can be seen that the black population for these 19 states was just under 15 million for 1976 and that total enrollment of black undergraduate students represented barely 3 percent of the black population. This indicates a gap of .8 percent in general participation or a shortfall of upwards of 115,000 students, considerably more than the shortfall of 87,000 under the old analysis. The population has risen since 1976 and any policy initiatives must have targets which are also adjusted upwards. The arithmetic is forthright, however, and should pose few problems for planners.

Under this analysis, West Virginia leads a list of states with high participation rates of black students in undergraduate education. Nearly five percent of West Virginia's black people were enrolled in undergraduate colleges. Oklahoma followed with 4.4 percent of its black population similarly enrolled. Ohio was at the national average in this respect (3.8 percent). Tennessee, Texas and North Carolina had identical participation rates at 3.5 percent followed by Kentucky at 3.4 percent.

Georgia led the list of low states with 1.9 percent of its black population enrolled as undergraduate students. This state was followed by Pennsylvania with 2.4 percent. The position of Pennsylvania on both the "low" list for black enrollment as a percent of black population and the "high" list for comparisons of percent of total undergraduate enrollment with percent of black

Table 9

Total Black Enrollment
As Percent of Black Population: 1976

State	Black Population	Total Enrollment	Enrollment As % of Population
TOTALS	14,893,500	452,795	3.0
Alabama	919,900	28,381	3.1
Arkansas	356,100	8,967	2.5
Delaware	85,300	2,425	2.8
Florida	1,179,000	34,626	2.9
Georgia	1,288,100	24,411	1.9
Kentucky	244,300	8,391	3.4
Louisiana	1,134,000	32,022	2.8
Maryland	828,500	31,329	3.8
Mississippi	840,500	24,951	3.0
Missouri	507,300	15,227	3.0
North Carolina	1,193,300	42,003	3.5
Ohio	1,033,600	39,376	3.8
Oklahoma	191,400	8,409	4.4
Pennsylvania	1,049,200	25,321	2.4
South Carolina	867,000	22,354	2.6
Tennessee	651,200	22,715	3.5
Texas	1,529,600	53,043	3.5
Virginia	930,800	25,819	2.8
West Virginia	64,400	3,025	4.7

population illustrates the value of corroborative analyses. While the black percent of the total undergraduate enrollment nearly matches the black percent of the population, Pennsylvania's total undergraduate enrollment itself fell below the national average for percent of total population. The state had only 3.1 percent of its total population enrolled in undergraduate colleges and universities in 1976 as compared to the national average of 3.8.

Arkansas followed Pennsylvania on the "low" list along with South Carolina, Delaware, Virginia and Louisiana. Two of these states have both a low rate of college participation generally and a low rate of black participation in this. They were South Carolina and Louisiana. Delaware also made both lists but for different reasons. The state had a high participation rate in undergraduate education (3.9 percent) but a low participation rate for black people in institutions in the state (2.8 percent). Given its proximity to Washington, D.C. and Baltimore, Maryland, it is entirely possible that large numbers of students are migrating to these centers for education. On the other hand, it could be that the state is simply not involving black people in the higher education enterprise.

By combining population and enrollment percents in a parity index, it is possible to express a state's effort in a single number and to rank order states according to parity. The index involves a ratio where:

$$\text{Parity} = 100 \frac{\text{Percent black enrollment}}{\text{Percent black population}}$$

Perfect parity, for example would be

$$100 \frac{\text{20 percent black enrollment}}{\text{20 percent black population}} = 100.$$

Most states will have a fraction of this but some will have more than parity as was the case for two states in this sample.

The parity index for the sample was 81 or

$$100 \frac{13.8 \text{ black enrollment}}{16.7 \text{ black population}}$$

A rank ordering of states according to parity indexes follows:

Parity Rank Ordering

1. West Virginia	- 125	10. Pennsylvania	- 82
2. Ohio	- 110	11. Missouri	- 81
3. Kentucky	- 100	12. Mississippi	- 81
4. Oklahoma	- 99	13. Louisiana	- 80
5. Maryland	- 90	14. Alabama	- 77
6. Tennessee	- 88	15. Texas	- 71
7. North Carolina	- 86	16. Florida	- 70
8. Virginia	- 85	17. Georgia	- 64
9. Arkansas	- 84	18. South Carolina	- 63

19. Delaware - 62

General Participation Rates and Population

Data comparing black undergraduate participation in higher education and population representation of black people bear out the earlier conclusions that gaps exist in the participation rates of black undergraduate students in the Adams-Califano states. A gap of a magnitude of 115,000 students and more was apparent in 1976. It may or may not have widened since that time. Further analysis for 1978 and preliminary analyses for 1980 throw some light on the question.

Some of the low participation rates of black people can be traced to lack of effort to involve them in the enterprise. In at

least three states, the problem is low involvement of all people in undergraduate education and a lower still involvement of black people in the enterprise. A fourth state may or may not have a low rate of black participation of black students due to student migration. Data were not available to enable the researchers to examine this further. The state has the smallest population in the sample.

Enrollment by Fields of Study

The University of California offers 780 degree programs on its nine campuses. The average private liberal arts college or public comprehensive college of moderate enrollment will offer between 15 and 20 programs. With a labor market for college graduates which is becoming ever more specialized and with a somewhat truncated demand for liberal arts majors, access to specialized programs will probably become a priority and perhaps a problem for black students in Adams-Califano states.

The HEGIS data which formed the core of the material for this study included data for black enrollment for fields where black and other minority students historically have been underrepresented. Table 10 offers some indication of participation in these here-to-fore underrepresented fields and some indication of the magnitude of the problems which may accrue in attempts to broaden black participation in specialized programs.

Business and Management programs involved 70,128 black students in 1976 in Adams-Califano states. A bit over 40 percent of these students were studying at four-year colleges, just under a third were enrolled at four-year white colleges and the rest were

Table 10

Enrollment of Black Students in Adams-Califano States by Field and College Type

Field	Total Enrollees	Percent by Type			
		Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTAL	452,795	1.85	33.05	34.85	30.25
Agriculture	1,796	.11	73.33	5.35	21.21
Architecture	988	-	27.43	19.74	52.83
Biological Science	11,874	.45	60.86	5.51	33.18
Business & Manag.	70,128	1.36	41.26	24.50	32.88
Engineering	10,763	.07	35.58	18.58	45.77
Physical Sciences	3,815	3.33	47.42	15.70	33.55
All Others	353,431	2.05	30.07	38.78	29.10

in two-year colleges, mostly white. These students represented 15 percent of the total students enrolled and this percent was comparable to the 16-18 percent of college freshmen who indicated that some type of business program would probably be their field of study in the year of the analysis (Astin, 1976). This figure has been climbing steadily and nearly 19 percent of the students in the fall of the 1979 freshman class indicated that they would major in business (Astin, 1980). Black educators have made a determined effort to install a variety of business programs on their campuses and to make students aware of the opportunities available. The efforts seem to be succeeding.

Engineering is another area which has received attention. Here the majority of the students are enrolled on white campuses.

At last count there were only five black engineering schools in the states in the study. Last fall, 15 percent of all freshmen indicated that they planned to study engineering (Astin, 1979). Participation of black students in engineering programs will necessarily mean participation of many black students in engineering programs on white campuses.

The 10,763 black engineering students enrolled in the institutions in the study represented 2.3 percent of the total number of black undergraduates enrolled and the gap between this enrollment and stated intentions of white freshmen to enroll in this field indicates a challenge of some magnitude. If black student enrollment were to achieve parity in 1980 in Adams-Califano states, some 546,153 undergraduates would and upwards of 60,000 would be enrolled in some form of engineering, a six fold increase over the enrollment for 1976.

As Table 10 indicates, the largest category of study in the HEGIS surveys is "All Others." Health sciences and education would probably loom large in the enrollment figures were they available. They rank second and fourth respectively in popularity for all students (Astin, 1979) and have long been favorites with black students.

Less than a half of one percent of the students indicated that they were majoring in agriculture. This is a field which is growing in popularity with white students. This is especially true on campuses where environmental sciences programs have been added to the ag school offerings along with pre-veterinary and conservation majors. Black people have moved from farms in such great numbers that it remains to be seen if interest can be rekindled in the field or in its attendant agribusiness and attendant eco-sciences.

Whatever, much of the participation might have to be on white campuses. The case of South Carolina illustrates this point. The School of Agriculture at South Carolina State College, a black school, has been phased into a Department of Natural Resources and all of the agriculture under the old land grant provisions has been shifted to Clemson University, the white land grant college for the state. A call to Clemson revealed that the 100 or so black agriculture students enrolled at South Carolina State in years gone by had shrunk to five black students enrolled in the School of Agriculture at Clemson in 1976.

General Participation by Fields of Study

The data indicate some movement toward increased participation in fields of study where black students have been underrepresented. Business and management enrollment approached the national averages for these fields in 1976. Engineering enrollment left much to be desired and agricultural enrollment was miniscule.

The problem of specialized fields in an increasingly fragmented labor market will present a challenge for planners and students alike. A specialized field means high costs which means, in turn, the designation of one campus in a state system in some cases to mount and operate the program. Students on other campuses often do not know that a new program exists and are thus effectively barred from participating in it and in the careers to which it leads.

An antidote to low participation of black students in these programs, as is now the case, would be the allocation of new programs to black campuses on one hand and a concerted effort to advertise and market the existing programs in black communities. Actuarial sciences, public history, corporate relations, broadcast

journalism, management and administrative sciences, clinical dietetics and more are only a tiny number of the specialized programs cropping up on campuses and in state systems. Adequate participation in fields for black students will require a concerted effort by all hands.

Black Undergraduate Enrollment: 1978

Black students increased their participation in undergraduate education in Adams-Califano states in 1978. Opening fall enrollment data secured from HEGIS tapes for 1978 indicated that 474,992 black students enrolled in undergraduate programs in the 19 states as compared to 459,012 enrolled in 1976. This represents an increase of 3.5 percent (Tables 11 and 12). Enrollments increased by about this magnitude for all students in the group, however, and little if any of the gap between black and white enrollments was erased.

Thirteen of the states showed increases in black enrollment while six showed decreases. Increases ranged from 1.84 percent for Texas to 26.35 percent for Delaware. Decreases ranged from 2.41 percent for Oklahoma to 8.3 percent for Ohio.

One is hard pressed to explain increases and decreases in enrollment in colleges and universities. Enrollment can be volatile. Economics plays a large role, it seems, and some institutions have been able to correct shortfalls in enrollment from one year to another by the simple expedient of recruiting harder and doing a better job of assisting students in arranging for financial aid.

Table 11

Enrollment of Black Students in Adams-Califano States by College Type: Public and Private Institutions 1978

ALL FIELDS

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	474,992	47,539	144,497	118,170	142,797	18,846	3,143
Alabama	32,007	2,830	13,229	6,455	7,937	1,554	2
Arkansas	9,891	169	2,893	1,119	4,506	688	516
Delaware	3,064	-	1,177	807	655	425	-
Florida	35,529	4,855	7,488	15,585	7,401	90	110
Georgia	27,223	1,526	12,166	4,550	8,521	460	-
Kentucky	7,890	-	1,194	1,880	4,428	388	-
Louisiana	32,655	688	17,677	3,812	10,416	62	-
Maryland	31,962	6,436	7,867	9,977	7,432	180	70
Mississippi	25,473	3,401	12,603	5,193	3,500	776	-
Missouri	14,992	3,742	755	2,924	6,763	-	808
N. Carolina	46,893	3,146	18,836	16,417	6,565	1,925	4
Ohio	36,108	5,474	3,019	8,409	19,202	3	1
Oklahoma	8,205	5,474	847	3,304	4,005	49	-
Pennsylvania	28,886	7,747	3,602	3,853	13,578	58	48
S. Carolina	25,249	2,220	7,291	8,065	5,689	1,984	-
Tennessee	25,545	2,897	7,314	4,302	9,542	1,490	-
Texas	54,021	2,042	12,810	13,805	15,066	8,714	1,584
Virginia	26,609	366	13,729	7,351	5,163	-	-
W. Virginia	2,790	-	-	362	2,428	-	-

Table 12

Percent Change in Undergraduate Enrollment
in Adams-Califano States 1976-78

State	1976	1978	% Change 1976-78
TOTALS	452,795	470,786*	3.97
Alabama	28,381	32,007	12.78
Arkansas	8,967	9,891	10.30
Delaware	2,425	3,064	26.35
Florida	34,626	35,529	2.61
Georgia	24,411	27,223	11.52
Kentucky	8,391	7,890	(5.97)**
Louisiana	32,022	32,655	
Maryland	31,329	31,962	2.02
Mississippi	24,951	25,473	2.09
Missouri	15,227	14,992	(1.54
North Carolina	42,003	46,893	11.64
Ohio	39,376	36,108	(8.30)
Oklahoma	8,409	8,205	(2.43)
Pennsylvania	25,321	28,886	14.08
South Carolina	22,354	25,249	12.95
Tennessee	22,715	25,545	12.46
Texas	53,043	54,021	1.84
Virginia	25,819	26,609	3.06
West Virginia	3,025	2,790	(7.77)

*Unclassified students excluded, 6212 (1976), 4206 (1978)

**( ) indicates a decrease in enrollment

Gains in Enrollment: 1976-1978

An additional 10 thousand or so students enrolled in public institutions in the states in 1978 while an additional eight thousand or so enrolled in private institutions (Tables 13 and 14). HEGIS codings were changed in 1978. Like classifications for 1976, an institution was designated as black when 50 percent or more of its enrollment was black. White schools were similarly designated but a category of "other" was added to encompass schools where neither race (nor ethnic group) constituted a majority. Schools in Texas, North Carolina, Missouri, Mississippi, Arkansas and Delaware fell into this category and they enrolled some 13 thousand black students. Chicano and Indian enrollment, perhaps, accounted for this phenomenon. An example would be a Texas institution with a third of each group (white, black, chicano) or 40 percent black, 40 percent white and 10 percent chicano. Neither would constitute 50 percent and the institution is coded "other." More important, perhaps, were changes in composition of some of the two-year colleges and an effort by NCES to label more assiduously. The number of unclassified students (now included as "other") was less (5297 vs 6219).

Whatever, total enrollment is more instructive for analyses for 1978 than are enrollments by states or by type of college. Black students in white two-year colleges, for example, fell from 150,822 in 1976 to 112,897 in 1978 while black enrollment in black two-year colleges rose from 6,703 in 1976 to 44,064 in 1978. This resulted from the new classifications without a doubt. The number of states reporting two-year black colleges, for example, rose from five in 1976 to 14 in 1978.

Table 13

Enrollment of Black Students in Adams-Califano States by College Type: Public Institutions 1978

ALL FIELDS

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	382,825	44,064	100,621	112,897	111,322	11,630	2,291
Alabama	22,006	2,434	6,296	5,859	7,417	-	
Arkansas	8,177	-	2,504	1,105	4,220	348	-
Delaware	2,656	-	1,177	615	439	425	-
Florida	29,935	4,855	4,666	15,559	4,855	-	-
Georgia	17,806	1,401	5,034	3,808	7,563	-	-
Kentucky	6,566	-	1,192	1,549	3,825	-	-
Louisiana	29,043	688	14,888	3,812	9,655	-	-
Maryland	30,867	6,436	7,867	9,919	6,477	168	-
Mississippi	21,916	2,216	10,904	5,155	3,052	589	-
Missouri	11,841	3,731	648	2,905	3,750	-	807
N. Carolina	36,149	2,662	12,703	15,861	4,588	335	-
Ohio	28,361	5,474	1,883	7,404	13,600	-	-
Oklahoma	7,549	-	847	3,218	3,484	-	-
Pennsylvania	22,425	7,747	3,602	3,101	7,917	58	-
S. Carolina	17,468	1,851	2,872	7,695	4,207	843	-
Tennessee	18,856	2,748	3,732	4,144	8,082	150	-
Texas	47,507	1,697	9,381	13,779	12,452	8,714	1,494
Virginia	21,349	124	9,644	7,214	4,367	-	-
W. Virginia	2,348	-	781	195	1,372	-	-

Table 14

Enrollment of Black Students in Adams-Califano States by College Type: Private Institutions 1978

ALL FIELDS

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	92,167	3,475	44,657	5,273	30,694	7,216	852
Alabama	10,001	396	6,933	596	520	1,554	2
Arkansas	1,714	169	389	14	286	340	516
Delaware	408	-	-	192	216	-	-
Florida	5,594	-	2,822	26	2,546	90	110
Georgia	9,417	12[illegible]	7,132	742	958	460	-
Kentucky	1,324	-	2	331	603	388	-
Louisiana	3,612	-	2,789	-	761	62	-
Maryland	1,095	-	-	58	955	12	70
Mississippi	3,557	1,185	1,699	38	448	187	-
Missouri	3,151	11	107	19	3,013	-	1
N. Carolina	10,744	484	6,133	556	1,977	1,590	4
Ohio	7,747	-	1,136	1,005	5,602	3	1
Oklahoma	656	-	-	86	521	49	-
Pennsylvania	6,461	-	-	752	5,661	-	48
S. Carolina	7,781	369	4,419	370	1,482	1,141	-
Tennessee	6,689	149	3,582	158	1,460	1,340	-
Texas	6,514	345	3,429	26	2,614	-	100
Virginia	5,260	242	4,085	137	796	-	-
W. Virginia	442	-	-	167	275	-	-

Four-Year College Enrollment Shifts

Enrollment in black four-year colleges, both public and private, declined slightly while black enrollment in white four-year colleges rose slightly. The enrollment decline for black four-year schools was rather substantial, about 3,000 students or 3 percent of the 103,000 enrolled in 1976* Black enrollment in white four-year colleges, on the other hand, increased by 4 percent from 107,000 in 1976 to 111,000 in 1978. Four states had increases of a thousand or more black students on white public four-year campuses: Georgia, North Carolina, Tennessee and Virginia. Alabama had an increase of 2300 students in this category. Significantly, in four of these states: Georgia, North Carolina, Tennessee and Virginia, enrollment of black students in black public four-year institutions declined. Virginia led the list with a decline of over 1100 students followed by Georgia and North Carolina with 500 or so each.

This raises a disturbing question about the stated intent by HEW and others to bring about integration of higher education while still preserving and enhancing the black colleges and universities. Do these shifts represent a zero-sum game? That is, are the black students which increased the enrollment on white campuses siphoned off from enrollment on black campuses? Are they being replaced by white students? The rhetoric in the HEW criteria is voluminous and quite specific about what states must do in this respect but events have a way of taking on a momentum of their own. It is easy to send an institution into a downward spiral by reducing its chief stock-in-trade: enrollment. This is especially true of public institutions where budgets are formula driven and

* Decline in public institutions

the formulas are based on enrollment. The author of this report has witnessed so many inadvertancies and mishaps in government planning and implementation that the situation here is not at all reassuring. Black enrollment expansion in the states should provide enough students for the states to integrate white schools more fully for a time. In the long run, however, for every black student going, a white student must take his place if black public colleges are to remain viable. Heartening to some extent is the indication by the data that black enrollment in black four-year colleges increased in four states: Alabama, Florida, Ohio and Pennsylvania.

Black students enrolled in four-year colleges dropped slightly from 1976 to 1978, declining to 61.15 from 63.30. Two-year enrollment, on the other hand, inched up toward the national average for black students (42 percent), rising from 36.70 percent to 38.85 percent. See Table 15. Louisiana and West Virginia had the highest percent of black students in four-year institutions with 86 and 87 percent respectively. Florida only had 42 percent of its black students in four-year institutions and Maryland only had 48 percent so enrolled. The national average is roughly 66 percent. Other states under this average included Delaware, Missouri, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina and Texas.

Gains in Enrollment in Underrepresented Fields

Black students posted significant gains in underrepresented fields from 1976 to 1978. Agriculture was up from 1796 to 1889, architecture from 988 to 1501, business and management from 70,128

Table 15

Percent of Black Students Enrolled in Two and Four-Year Colleges in Adams-Califano States in 1978

State	All	Percent 2-Year	Percent 4-Year
TOTALS	474,992	38.85	61.15
Alabama	32,007	33.86	66.14
Arkansas	9,891	19.98	80.02
Delaware	3,064	40.21	59.79
Florida	35,529	57.78	42.22
Georgia	27,223	24.01	75.99
Kentucky	7,890	28.75	71.25
Louisiana	32,655	13.97	86.03
Maryland	31,962	51.91	48.09
Mississippi	25,473	36.78	63.22
Missouri	14,992	44.46	55.54
North Carolina	46,893	45.82	54.18
Ohio	36,108	38.46	61.54
Oklahoma	8,205	40.87	59.13
Pennsylvania	28,886	40.36	59.64
South Carolina	25,249	48.59	51.41
Tennessee	25,545	34.01	65.99
Texas	54,021	45.47	54.53
Virginia	26,609	29.00	71.00
West Virginia	2,790	12.97	87.03

to 82,044! Engineering enrollment rose from 10,763 to 12,653 and the physical sciences from 3815 to 3994. The biological sciences enrollment dropped slightly, from 11,874 to 11,325. See Table 16.

The majority of the agriculture enrollment was still on black four-year campuses as was the largest single concentration for the physical sciences. Almost half of the engineering enrollments, however, were on white four-year campuses and black and white four-year institutions shared a third each of the business and management enrollment. Another third was scattered: two year colleges in the white sector, 16 percent, black sector, six percent and "other" nine percent.

The Appendix contains tables which contain data on business and engineering enrollment according to states and type of institutions. A table comparing national black and white participation rates is also included for these and several other fields.

General Changes in Participation Rates 1976-78

The data indicate that black participation rates in higher education increased slightly from 1976 to 1978. Such an increase (about three percent) must be considered in the context of increases for all American institutions. In such a context, gains in the direction of parity are small but nevertheless apparent.

White four-year colleges gained black students and black four-year colleges lost black students over the two year period. The states losing and gaining matched in many cases and the question is raised of how much, if any, of white college gains in this area represent losses for black colleges. Is a zero-sum game in progress?

Table 16

Enrollment of Black Students in Adams-Califano States by Field and College Type

Field	Total Enrollees	Percent by Type					
		Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTAL	470,786	10.10	29.80	25.10	30.33	4.0	.67
Agriculture	1,899	.11	69.46	6.74	21.70	-	2.00
Architecture	1,501	5.66	47.63	6.40	39.71	-	.60
Biological Science	11,324	2.19	53.81	4.47	37.62	1.03	.88
Business & Management	82,044	6.07	33.98	16.39	33.19	9.36	1.02
Engineering	12,653	3.16	32.45	12.94	49.31	1.38	.76
Physical Sciences	3,994	2.98	49.35	7.46	35.38	4.11	.73
All Others	357,371	11.67	27.48	28.56	28.72	3.00	.57

Summary of Gains and Losses

	1976	1978	
Agriculture	1,796	1,899	+ 103
Architecture	988	1,501	+ 513
Biological Sciences	11,824	11,324	- 550
Business & Management	70,128	82,044	+ 11,816
Engineering	10,763	12,653	+ 1,890
Physical Sciences	3,815	3,994	- 179

The most striking finding for this section has to be the increases in black participation in the underrepresented fields. An additional 550 students and more were enrolled in architecture nearly 2000 more were enrolled in engineering and business and management picked up 11,816 students in an already burgeoning category! Five of the six fields listed as "underrepresented" gained black students. Much more needs to be done of course. Black students enrollment represent less than 50 percent of parity in enrollment in most of the fields with a possible exception of business and management.

Correlates of Black Enrollment

Black enrollment in Adams-Califano states has shown a steady increase from year to year for all of the periods of data collection since HEW began such an effort. The listings for 1974 through 1978: three collection periods, make this clear. See below:

1974 - 377,790

1976 - 459,012

1978 - 474,992

What factors make for increases and decreases in black enrollment? Identification of exact causal factors is probably not possible but social science research tools do afford methods for identification of strong relationships between selected factors and enrollment.

An effort was made in this research to identify such relationships. Remarkable differences in rates of participation of black students in higher education were apparent among the 19

states in the sample. Some states exceeded parity in this respect while others fell far below it. Why? Black students limited much of their participation (or had it limited for them) to black institutions in some states while the exact opposite was apparent in others. Why?

Descriptions of Variables in Regression Equations

A series of regression equations were developed in an attempt to identify factors with strong relationships to the phenomena addressed above. Data were collected for a set of variables which traditionally influence enrollment for black and other students along with data peculiar to this research. These variables were cast as predictor variables for a series of multiple regression equations.

Enrollment of black students expressed as a parity index and as a percent of total black population was cast as an outcome variable along with percent enrollment of black students on white four-year campuses. The best predictor of participation in higher education has traditionally been family income (Brazziel, 1974). Young people from families whose earnings placed them in the top ten percent of the nation were five times more likely to attend college than were young people from families whose incomes place them in the bottom ten percent at the beginning of the past decade. Efforts to assure greater equity in attendance are lowering these odds somewhat but family income is still the most powerful determinant.

Family income was selected as a variable to be tested as a predictor of black participation in higher education in the 19

states of this study. Population was also selected as a variable and expressed as total population of the state and black percent of population. Total black population is included in the summaries of predictor variables (Table 17 and 18) for informational purposes.

Rounding out the list of potential predictor variables were variable codings for type of state, i.e., northern border, middle south and deep south. Size of state expressed in square miles and the number of Standard Metropolitan Statistical Areas (SMSAs) with black colleges were also included. Theoretically, young people in states with average to high black income would go to colleges more readily than would those in less fortunate states and they would do so more readily if black colleges were located in their metropolitan areas. Black median income and the percent of state colleges which were black was also included as a variable under this premise.

The regional state schools rather than the flagship state research university enrolls most of the public four-year students and a large proportion of black students in the nation. Admissions standards are average and costs are lower. These schools are also located in SMSAs in most cities in the country. Georgia State University and Cleveland State University are examples of this sort of institution. Percent of a state's colleges which fell into this category (regional state colleges and universities) was included as a final potential predictor variable.

As noted above, parity in enrollment of black students and enrollment of black students on white four-year campuses were cast as outcome variables for the regression equations. Summaries of these variables by state are found in Table 19 and the variation

Table 17

Predictor Variables Summary: Black Population and Family Income

State	Black Population Estimate - 1976*	Median Black Family Income - 1975**
Alabama	959,000	7,639
Arkansas	366,000	7,010
Delaware	77,000	8,630
Florida	1,319,000	7,575
Georgia	1,336,000	7,781
Kentucky	296,000	8,850
Louisiana	1,070,000	6,823
Maryland	842,000	12,851
Mississippi	829,000	5,685
Missouri	555,000	9,977
North Carolina	1,206,000	7,354
Ohio	1,003,000	12,237
Oklahoma	179,000	7,636
Pennsylvania	1,021,000	8,066
South Carolina	881,000	8,284
Tennessee	687,000	7,941
Texas	1,428,000	8,791
Virginia	779,000	9,003
West Virginia	57,000	8,508

*Source U.S. Census Bureau, p. 20-334, States by Race: Population Estimates 1976

**Source U.S. Census Bureau, p. 60-111 and 112, Income Estimates, 1975

Table 18

Predictor Variables Summary

State	Population (000)	Percent Black	Types*	Size of State Sq. Miles (000)	Percent White Regional State Inst.	Percent SMSAs with Blk. Colleges	Percent 4-Year State Colleges Black
Alabama	3,444	27	1	51	37	66	7
Arkansas	1,923	19	1	53	53	33	6
Delaware	548	16	3	2	0	33	33
Florida	6,789	17	1	56	16	33	2
Georgia	4,590	28	1	58	33	50	10
Kentucky	3,219	8	3	40	23	0	3
Louisiana	3,643	31	1	48	44	66	8
Maryland	3,922	21	3	10	30	66	6
Mississippi	2,217	38	1	47	24	66	16
Missouri	4,677	11	4	69	18	33	2
North Carolina	5,082	23	2	52	26	66	11
Ohio	10,652	10	4	41	14	0	1
Oklahoma	2,559	7	3	69	27	0	4
Pennsylvania	11,794	9	4	45	16	0	1
South Carolina	2,591	33	1	31	30	33	3
Tennessee	11,197	14	2	267	33	33	2
Texas	3,924	17	2	42	18	33	2
Virginia	4,648	20	2	40	27	66	4
West Virginia	1,744	4	3	24	45	0	5

* 4 = Northern 3 = Border 2 = Middle South 1 = Deep South

Table 19

Outcomes Variables Summary

States	Variables		
	Parity Index	Black Enrollment as % of Black Population	Percent of Black Students in 4-yr. White Colleges
TOTAL	81	3.0	30.2
Alabama	78	3.1	31
Arkansas	84	2.5	55
Delaware	62	2.8	23
Florida	70	2.9	15
Georgia	64	1.9	39
Kentucky	100	3.4	54
Louisiana	80	2.8	34
Maryland	81	3.8	21
Mississippi	81	3.0	14
Missouri	81	3.0	37
North Carolina	86	3.5	11
Ohio	110	3.8	48
Oklahoma	99	4.4	45
Pennsylvania	82	2.4	38
South Carolina	63	2.6	23
Tennessee	88	3.5	40
Texas	71	3.5	28
Virginia	85	2.8	15
West Virginia	125	4.7	60

is readily apparent as is the variation in the tables on income, population and the rest of the variables (Tables 17 and 18).

Black population ranged from 57,000 in West Virginia in 1976 (4 percent of the population) to 1.4 million in Texas (14 percent of the population). Texas was also the largest state with acreage exceeding 267,000 square miles. Delaware, of course, was the smallest. Theoretically, black students would be more likely to enroll in a white college in their service area or SMSA than to make the trek to a black college some miles away. Oklahoma and Missouri were second largest in area with 69,000 square miles each.

Black family income ranged from a low of $7,010 per year in Arkansas to $12,851 in Maryland. Ohio was third highest with $12,237. Two states were coded as Northern, while seven were coded as Deep South, four Middle South and five as Border. White regional state colleges and universities were not represented at all in Delaware but represented 53 percent of the schools in Arkansas, 45 percent of those in Louisiana and 69 percent of those in Oklahoma. No SMSAs (Standard Metropolitan Statistical Areas) in Kentucky, Delaware, Ohio, Oklahoma or Pennsylvania had black colleges located therein while 66 percent of the SMSAs in Alabama, Louisiana, Maryland, Mississippi, North Carolina and Virginia had black colleges.

As noted earlier an enrollment parity index along with percent of black students enrolled in four-year white colleges were cast as outcome variables for the analyses. Parity was expressed as an index where:

$$\text{Parity} = 100 \frac{\text{Black percent of enrollment}}{\text{Black percent of population}}$$

The parity index for the 19 states was 81:

$$100 \frac{\text{13 percent black enrollment}}{\text{16 percent black population}}$$

Table 19 contains parity indexes for each state. They range from a low of 62 for Delaware to 125 for West Virginia. The table also indicates black enrollment as a percent of black population where ranges of highs of 4.4 and 4.7 are recorded for Oklahoma and West Virginia and lows 1.9 and 2.4 are recorded for Georgia and Pennsylvania. The final outcome variable is also included in Table 19: percent of black students in white four-year colleges. The ranges here included highs of 55 percent and 60 percent for Arkansas and West Virginia and lows of 11 and 15 percent for North Carolina and Virginia.

Correlates of Black Enrollment as Percent of Black Population

Blacks as a percent of a state's total population correlates negatively with black participation in higher education in a state, the higher the black percent of the population, the lower the percent of the black population enrolled in colleges and universities. The simple correlation coefficient for this relationship was -.55. The size of the state was also negatively correlated, $r = -.06$ as was the percent of the states' colleges which were black, $r = -.24$. Median black income was positively correlated, $r = .34$.

All of these variables, along with size of state in square miles and white regional state colleges as percent of total colleges, entered the stepwise multiple regression equation. They accounted for a respectable percent of the variance ($R^2 = .48$). The optimal regression equation is listed below:

Y = -.26 (percent black population) -.11 (total state population) -.17 (percent black colleges) +.96 (median black income) + Constant (28.5)

Table 20 contains these data. A perusal of the predictor and outcome summary tables will reveal the origins of these relationships. The lowest participation rates for black students were in Georgia and South Carolina, both with large black populations, low median black incomes, and a sizable concentration of black colleges. The highest participation rates were in Ohio, Kentucky, Oklahoma and West Virginia. All had smaller percents of black population, fewer black colleges and higher black incomes. These are the extremes and the gradations along the continuum were sufficient to generate the relationships manifest in both the simple correlations and in the multiple regression analyses.

Table 20

Stepwise Regression Analysis: All Variables and Percent of Black Population Enrolled in College - N = 19

Variables	R	R^2	b	F
Blacks as Percent of State's Population	.55	.30	-.26	7.3*
Total State Population	.59	.35	-.11	4.4*
Percent of 4 year colleges Which are Black	.62	.39	-.17	3.2*
Median Black Income	.64	.42	.96	2.5
State Size in Square Miles	.68	.47	-.41	2.3
White Regional State Colleges as Percent of Total	.69	.48	.27	1.4

* R^2 significant at .05 level of confidence

Optimal Equation: Y = -.26 (percent black population) -.11 (total state population) -.17 (percent black colleges) +.96 (median black income) + Constant (28.5)

To control for the influence of states with very small black populations, West Virginia, Oklahoma and Kentucky were removed from the sample and a stepwise regression equation was computed for the remaining 16 states. Percent of black population disappeared as a factor entirely in this analysis (Table 21) although it predominated in the previous analysis by entering the regression equation first and accounting for a lion's share of the variance.

Table 21

Stepwise Regression Analysis: All Variables and Percent of Black Population Enrollment in College
N = 16

Variables	R	R^2	b	F
Median Black Income	.56	.31	.16	6.4*
Total Area of State (Square Miles)	.61	.38	.24	3.9*
Percent of 4 year Colleges Which are Black	.63	.40	.26	2.7*
White Regional State Colleges As Percent of All State Colleges	.67	.45	-.12	2.3
Total Population of State	.72	.51	-.64	2.1

* R^2 significant at .05 level of conficence
Optimal Equation: Y = .16 (median Black Income) + .24 (Total Area of State) + .26 (Percent of 4 year Colleges Which are Black) + Constant (2.21)

In the new equation, where very small black populations had been excluded, median black income entered the equation first and accounted for 31 percent of the total 51 percent of variance accounted for in the computation. Total area of the state, percent of black colleges, percent of regional state colleges and total population of the state were all significant contributors to variance accounted for in the analysis. Black college percents changed from a negative to a positive correlation in this analysis as did size of state.

In sum, it seems that when border states with small concentrations of black population are excluded, participation by black people in higher education is closely related to the size of the family income, the size of the state and the presence of black colleges.

Correlates of Black Enrollment in White Four-Year Colleges

The range for percent of black students enrolled on white four-year campuses was very wide for the sample. Sixty percent of black students in West Virginia colleges were enrolled in white four-year institutions. Fifty-five percent were so enrolled in Arkansas and 40 percent in Tennessee (Table 19). This drops to only 11 percent in North Carolina and 15 percent in Virginia and Florida. Why?

Data in Table 22 indicate that the presence of black colleges is related to enrollment of black students on white four-year campuses. Metropolitan areas with concentrations of black colleges entered the regression equation first in this analysis and the correlation was negative, i.e., the higher the concentration of

black colleges in the metropolitan areas of a state, the lower the enrollment of black students in white four-year colleges.

Table 22

Stepwise Regression Analysis: All Variables and Percent of Black Students Enrolled in White Four-Year Colleges
N = 19

Variables	R	R^2	b	F
Percent of Metropolitan Areas With Black Colleges	.70	.49	-.44	16.8*
White Regional State Colleges as Percent of All Four-Year Colleges	.86	.74	.70	23.4*
State Size in Square Miles	.88	.78	-.23	16.7*
Median Black Income	.88	.78	.11	12.5
Black Colleges as Percent of Total Number of Four-Year Colleges	.89	.79	.18	9.8
Blacks as Percent of Population	.89	.79	-.16	7.7
Population of State	.89	.79	-.34	6.1
Variable not in equation - State Type				

* R^2 significant at .05 level of confidence
Optimal equation: Y = -.44(Metro areas with black colleges) + .70(Regional state colleges as percent of total numbers of four-year colleges) -.23(State size in square miles) Constant (24.6)

The second key factor here seems to be the number of white regional state colleges and universities in a state. Variance accounted for in the analysis rose from 49 percent to 74 percent when this variable entered the equation. Size of state accounted for another four points and these three factors dominated the amount of variance accounted for in the equation. The picture emerging here is high black participation in white four-year colleges in states with few black colleges but a considerable number of white regional institutions, the latter offering average admission hurdles, proximity (many students commute) to black students and low tuition.

To test the influences of border states with small populations in this finding, West Virginia, Oklahoma and Kentucky were removed from the sample as in previous analysis and a second equation (Table 23) was computed. The presence of black colleges again entered the equation first and impacted negatively on enrollment of black students on white four-year campuses. White regional colleges again accounted for half again as much variance. Population of the state was negatively correlated in the equation but state type (northern, border, middle south and deep south) was positively correlated. The latter no doubt reflects the influence of Ohio and Pennsylvania where large numbers of black students are enrolled in white four-year colleges.

The picture emerging here is one of choice, it seems. A black Virginia youngster has the opportunity to attend a variety of institutions in the Hampton Roads area, for example. Hampton Institute, Norfolk State University, two black institutions, are located there as is Old Dominion University, a white regional

school, and Virginia Wesleyan, a white private school. Most choose the black schools. A graduate of one of the black institutions remarked to the investigator that the black schools simply were the place to go. Both had been around longer than the white schools, their programs were better or at least no worse, Hampton was one of the best known colleges in the country, the social life on white campuses was the pits and that he didn't have time for the hassles and hostility he expected to find there.

Table 23

Stepwise Regression Analysis: All Variables and Percent of Black Students Enrolled in White Four-Year Colleges
N = 16
Range = 12.5 - 49.9

Variables	R	R^2	b	F
Percent of Metropolitan Areas With Black Colleges	.65	.42	-.37	10.4*
White State Colleges and Universities as Percent of All Four-Year Colleges	.82	.68	.74	14.3*
Total Population of State	.85	.72	-.10	10.4*
State Type	.87	.76	3.38	9.08*
Blacks as Percent of Population	.87	.77	-.50	6.77

* R^2 significant at .05 levels of confidence
Optimal Equation: Y = -.37 (Percent of Metro Areas with Black Colleges) + .74 (Regional State Colleges and Universities as Percent of All four-year Colleges) + -.10 (State Population) X 3.38 State Type X Constant (33.2)

The above is completely unscientific as far as research sampling is concerned. The effort took about one minute, however, and offers some insight into the dynamics involved. Further study would probably reveal the same perceptions and thought patterns for a larger sample.

Some black students in areas without strong black schools or with no black schools might feel the same way but choose to attend white regional schools or other white institutions because of convenience. Others relate easily to white people, overlook hostility and attend white colleges on about the same basis as they attended their integrated high schools. Still others come for special programs and where opportunities to attend white research universities are offered, students will accept with a feeling that their careers will be enhanced by a degree from these schools - and it will. The new marketing approach to admissions dovetails nicely with the new stress on diversity in colleges and universities. Student needs for choices are nothing if not varied and the choices offered black students in some states are quite varied indeed. This is all to the good.

Correlates of Parity in Black Enrollment

When state efforts at enrollment of black undergraduates is expressed as a parity index and where parity indexes are expressed as a ratio of black enrollment to black population, wide variations occur in this group of states. Parity indexes (see Table 19) range from highs of 125 and 110 for Ohio and West Virginia to lows of 62 and 64 for Delaware and Georgia. Why?

A final set of regression equations (Tables 24 and 25) were developed to identify relationships for this variation. Again

blacks as a percent of population was an important correlate along with regional state colleges as a percent of the total institutions in a state. Type of state was a strong correlate here, raising the amount of variance accounted for from 35 percent for the first two variables to 43 percent after it entered the equation. The presence of states with very small populations was again a factor here.

Table 24

Stepwise Regression Analysis: All Variables and State Parity Indexes for Black Enrollment
N = 19

Variables	R	R^2	b	F
Blacks as Percent of State Population	.56	.31	.26	7.9*
Regional State Colleges as Percent of Total	.59	.35	.72	4.4*
State Type	.66	.43	12.48	3.9*
Percent of Metropolitan Areas With Black Colleges	.69	.48	.32	3.2*
Total Area of State (Square Miles)	.69	.48	.33	2.4*
Total State Population	.69	.48	.46	1.8

* R^2 significant at .05 level of confidence

Optimal equation: Y = .26 (Blacks as Percent of Population) + .72 (Regional State Colleges as Percent of Total) + 12 (State Type) x Constant (39)

To adjust for this factor, the three border states with small black populations were again removed from the sample (West Virginia, Kentucky and Oklahoma) and a second regression equation was developed (Table 25).

Table 25

Stepwise Regression Analysis: All Variables and State Parity Indexes for Black Enrollment

Variables	R	R^2	b	F
State Type	.55	.30	7.84	6.15*
Percent of Metropolitan Areas With Black State Colleges	.57	.32	-.35	3.17*
Black Colleges as Percent of Four-Year Total	.62	.39	2.92	2.57*
Total Area of State (Square Miles)	.64	.41	.70	1.93
Median Black Income	.66	.43	.27	1.54
Blacks as Percent of State Population	.66	.44	-.49	1.20
Regional State Colleges As Percent of Total	.67	.45	.18	.95

* R^2 significant at .05 level of confidence

Optimal equation: Y = 7.84 (State Type) -.35 (Metropolitan Areas With Black State Colleges) + 2.92 (Black Colleges as Percent of Four-Year Total) + Constant (39)

Type of state emerged as the single strongest correlate in this equation. The rank order of states tell why, Northern, border and mid-south states predominated in the top third of the parity indexes with Ohio, Tennessee, North Carolina, Virginia, Pennsylvania,

Arkansas and Maryland all exceeding the parity mean of 81 by handsome margins. Bringing up the rear were Georgia, South Carolina, Texas and Florida, all coded as Deep South states. Delaware, a border state, was last, however.

Percent of metropolitan areas with black colleges was negatively related to the parity indexes, again reflecting the type of state to some extent. Sixty-six percent of the SMSAs in the low states had black colleges yet effort was still minimal. Percent of four-year colleges in a state which were black, however, indicated the importance of black colleges in parity scenarios by raising the R^2 from .32 to .39 when it entered after the first two variables described above. Black colleges do much to aid states to achieve parity but states must try hard overall, it seems. Total state area and median black income entered next and a respectable 43 percent of the variance in the sample was accounted for after their entry. The picture of high parity emerging here is one of state concern for the education of all of its citizens coupled with the provision of a varied combination of opportunities to bring this about: white colleges, black colleges, black employment and income opportunities and more. This concern seems higher in northern and border states and lower elsewhere on the scale of things.

Summary

This study examined patterns of enrollment of black undergraduate students in 19 states affected by Adams-Califano litigation and rulings. The general purpose of the research was to ascertain the degree of general participation and to identify trends toward increases or decreases in this participation. The Adams-Califano litigation relates to increases of black students on white campuses and this was addressed in the study along with various measures of assessment of state efforts in assuring black participation of black students in the higher education enterprise.

Increases in the participation of black students in traditionally underrepresented fields of study were documented in the study. A final section included regression equations computed in an attempt to identify correlates for variability in participation rates in a variety of settings. Data from enrollment tapes of the Higher Education General Information Survey (HEGIS) for 1976 and 1978 formed the core of the data for the study. A total of 459,012 black undergraduate students were enrolled in the Adams-Califano states in 1976. This represented 13.6 percent of the 3 million and more undergraduates enrolled in these states. Black population in these states represented well over 16 percent of the total, however, and total black participation left something to be desired. When parity is expressed as a ratio of enrollment to population, the index for these states is .81.

Some 80 percent of the students were enrolled in public institutions in the states and the number attending full-time was

high when compared to national averages. The ratio of public to private enrollment was also high. Black student enrollment in two-year colleges was higher than national levels, following a national trend in this respect.

When enrollment is examined according to definitions of parity, this condition is not reached for the states as a whole but three states reach or exceed it: West Virginia, Ohio and Kentucky. Oklahoma reached 99 percent of parity for the year in question (1976).

The data indicated that black enrollments increased in 1978 with the increase approximating 3 percent. White enrollment in these states also increased and the parity indexes remained about the same. Black four-year colleges showed a loss in enrollment while enrollment of black students on white four-year campuses showed a gain. Whether the gains of the latter came at the expense of the former is an unanswered question and the general question of a zero-sum game in these shifts comes to the fore. Cross-racial enrollment is encouraged by Adams-Califano guidelines.

A significant percent of black students attended white four-year colleges in the 19 states. Over 30 percent of the total enrollment attended these schools while slightly over 33 percent attended black four-year colleges. The rest attended two-year colleges, most of which were white. Wide variations were apparent in these patterns. Over 60 percent of West Virginia's black students were enrolled on white four-year campuses while only 11 percent of North Carolina's students were similarly enrolled. Kentucky, Ohio and Oklahoma were also high and Florida, Virginia and Mississippi were also low.

One of the more heartening findings was the increase in black students in underrepresented fields of study. Students enrolled in business and management courses of study in 1978 showed an increase of 11 thousand over the 70 thousand enrolled in 1976. Over 12 thousand engineering students were enrolled, up by nearly two thousand.

Enrollment of black students in white public colleges is substantial and seems to be increasing. Adams-Califano litigation involves public institutions and this finding should be of interest to litigants. Indeed, in 1978, there were half again as many black students in public white colleges (224,219) as in black public colleges (144,685).

On four-year campuses, the trend toward increased enrollment of black students on white campuses was pronounced. The figures were 111,322 for white campuses and 100,621 for black campuses. White campuses enrollment increased by 4,000 students over a two-year period (1976-78) while black college enrollment decreased by 3,000 students.

This raises a question of whether a zero sum game is in progress in this area. Are gains on white campuses made at the expense of losses on black campuses? Only further research will tell. Data from this study indicate that such may be the case. Although gains and losses of black and white campuses involved a headcount of 7,000 students, total black enrollment for public four-year campuses only increased by 1,142 students, rising from 210,801 to 211,943.

The plans of Adams-Califano litigants seem to indicate that increased overall enrollment of black students and increased

enrollment of black students on white campuses were to go hand-in-hand. Parity in enrollment would be reached and many black students would be on both black and white campuses. These data seem to indicate that this is not the case. Parity is not being reached and while there are many black students on white campuses, there are also fewer on black campuses.

The criteria specifying goals for enhancement of black colleges will also be affected and perhaps jeopardized if there is indeed a rapidly accelerating trend toward dwindling enrollment on black public four-year campuses. A certain enrollment level is necessary for program development and general institutional strength. Programs and strength are the chief ingredients of any enhancement program. Again, careful and immediate study is indicated here.

A series of regression equations were developed to explore relationships between a set of predictor variables, general participation rates of black students, enrollment of black students on white four-year campuses and state parity indexes for black enrollment. Generally, high participation rates and high parity indexes were closely related to type of state (Northern, Border, Middle-South, Deep South), black family income, the presence of black colleges and the number of white regional state colleges and universities in a state. The latter have average admissions, low tuition rates and close proximity. Generally, northern and border states with higher black family incomes and a mix of black and white colleges had higher parity indexes for black enrollment. These schools (black colleges and regional white state colleges) were also important as predictors of black enrollment on white

four-year campuses. Black colleges were negatively correlated in this respect, however. The more black colleges in a state, the lower the black participation on white four-year campuses.

In sum, the regression equations, and indeed the data of the study, indicated the dynamics of diversity and choice in the participation process of black students in these states. States with high parity indexes for overall participation seemed to offer these choices and to promote this diversity. A good mix of public and private two and four-year and black and white colleges seems to be the key in these efforts plus genuine concern that black citizens are involved in the higher education enterprise.

Suggestions for Further Study

Suggestions for further study include the examination of the operation of a zero-sum game in enrollment shifts between black and white four-year public institutions. Is such a game in progress? Are losses of black students made up by gains in white students? Is the rate of shift precipitous?

Analysis of enrollment in all sectors might well be completed every other year to coincide with biennial collection of data on the NCES reports and tapes. This was a low budget study (a very low budget) and future analyses could be done for about the same amount of money, with some adjustment for inflation.

Analysis of widely publicized reports of enrollment drops for black students in Adams-Califano states should be examined. The reports involved 1979 opening fall enrollment and the rather sharp drop is being attributed to foul-ups in student financial

aid. These snarls stemmed, it seems, from a new management system installed by a new U. S. Office of Education official who was brought in to streamline the aid system and to eliminate abuses in it. The man has since departed but whether the financial aid system recovers and whether black enrollment regains its former levels (if there indeed was a drop) remains to be seen.

Finally, an analysis of possible drops in baccalaureate degree production seems quite necessary at this juncture. Some 60,000 black students win baccalaureates each year with black colleges accounting for nearly half the total. Dropout rates of black students in white colleges are high. There is a psychic toll exacted on many students and more than a little hostility is experienced by many. This drives down graduation rates. If there is indeed a rapid flow of black students onto white campuses, baccalaureate degree production will probably be affected. How much or how seriously remains to be seen. Again, serious study is indicated here.

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Note: Estimates of demographic, social and economic characteristics of the population of all states generated directly from a single sample survey became available for the first time as a result of the 1976 Survey of Income and Education. The survey is commonly known as the Intercensal Estimates and it forms the basis and constitutes the core data of the U.S. Census documents cited in the references. Data from these documents constituted the core data for the regression analyses for this study.

APPENDIX

Table 26

Frequency and Percentage Distribution of Black Enrollment in Higher Education, by Census Region, Fall 1976

Region	Total Blacks in All Higher Education		Blacks in Higher Education Institutions Other Than HBC's	
	Number	Percent	Number	Percent
Northeast	179,605	17.4	176,371	20.7
North Central	229,850	22.2	226,973	26.7
South	463,728	44.8	285,948	33.6
West	159,187	15.4	159,187	18.7
Outlying Areas	2,310	0.2	2,310	0.3
Total	1,034,680	100.0%	850,789	100.0%

Source: Preliminary data on Fall 1976 enrollment from the National Center for Educational Statistics.

Table 27

Percent Distribution of All Students and Black Students, by Major Field and Level of Enrollment, Fall 1976*

	First-Time Freshmen		All Undergraduates		First Year Graduates		All Post-Baccalaureate	
	Total	Black	Total	Black	Total	Black	Total	Black
Agriculture	1.2	0.3	1.6	0.3	1.2	0.3	1.0	0.3
Architecture	0.5	0.2	0.7	0.3	0.8	0.7	1.0	1.0
Biological sciences	2.0	1.5	3.2	2.3	2.9	1.4	3.0	1.0
Business/management	10.7	11.5	12.8	13.3	14.2	9.7	11.0	8.3
Engineering	3.6	2.4	4.5	2.5	4.8	1.1	4.0	1.0
Physical sciences	2.0	0.5	1.5	0.7	2.3	0.8	3.0	1.0
Professional Fields	--	--	--	--	0.3	0.1	15.4	12.1
All Others	80.3	83.6	75.8	80.6	73.4	86.0	61.6	75.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Does not include unclassified students; and, percentages may not add to total due to rounding.

Source: Preliminary data on Fall 1976 enrollment from the National Center for Education Statistics.

Table 28

Enrollment of Black Students in Adams-Califano States by College Type: Public Institutions 1976

Business and Management

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	52,111	610	20,078	14,477	16,946
Alabama	3,789	234	1,196	1,324	1,035
Arkansas	1,222	-	370	98	754
Delaware	529	-	396	98	37
Florida	1,574	-	810	-	764
Georgia	2,974	-	1,219	752	1,003
Kentucky	1,035	-	243	162	630
Louisiana	5,391	312	1,795	1,320	1,964
Maryland	2,172	-	1,434	-	738
Mississippi	3,993	64	2,814	458	657
Missouri	936	-	160	37	739
North Carolina	3,922	-	3,018	491	413
Ohio	4,454	-	545	2,107	1,802
Oklahoma	1,666	-	246	714	706
Pennsylvania	2,711	-	75	1,921	715
South Carolina	1,085	-	623	21	441
Tennessee	2,899	-	647	1,128	1,124
Texas	8,062	-	1,911	3,483	2,668
Virginia	3,316	-	2,396	346	574
West Virginia	381	-	180	19	182

Table 29

Enrollment of Black Students in Adams-Califano States
by College Type: Public Institutions 1978

Business and Management

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	57,175	4,344	19,468	10,584	19,995	2,203	581
Alabama	3,995	474	959	948	1,614	-	-
Arkansas	1,400	-	351	177	872	-	-
Delaware	832	-	411	160	27	234	-
Florida	1,817	-	943	-	874	-	-
Georgia	3,394	314	1,080	778	1,222	-	-
Kentucky	1,012	-	252	126	634	-	-
Louisiana	4,457	148	1,649	533	2,127	-	-
Maryland	3,787	334	1,644	857	947	5	-
Mississippi	3,431	79	2,098	584	670	-	-
Missouri	1,022	-	-	-	869	-	153
N. Carolina	4,268	-	3,685	-	583	-	-
Ohio	5,832	1,329	542	2,060	1,901	-	-
Oklahoma	1,318	-	180	314	824	-	-
Pennsylvania	3,476	1,196	615	724	941	-	-
S. Carolina	1,363	-	683	44	636	-	-
Tennessee	3,586	222	773	935	1,623	33	-
Texas	8,450	248	1,261	1,851	2,731	1,931	428
Virginia	3,279	-	2,102	445	672	-	-
W. Virginia	456	-	180	48	408	-	-

Table 30

Enrollment of Black Students in Adams-Califano States by College Type: Private Institutions 1976

Business and Management

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	18,017	345	8,855	2,705	6,112
Alabama	1,746	-	1,079	555	112
Arkansas	157	10	92	2	53
Delaware	115	-	-	49	66
Florida	1,680	-	495	2	1,183
Georgia	1,462	-	1,358	31	73
Kentucky	78	-	-	13	65
Louisiana	431	-	354	-	77
Maryland	386	-	-	361	25
Mississippi	484	198	228	-	58
Missouri	530	-	-	1	529
North Carolina	2,300	-	1,583	535	182
Ohio	2,298	-	356	595	1,347
Oklahoma	205	-	-	111	94
Pennsylvania	1,350	-	-	28	1,322
South Carolina	802	-	534	117	151
Tennessee	1,103	49	790	25	239
Texas	1,504	88	1,005	3	408
Virginia	1,292	-	981	241	70
West Virginia	94	-	-	36	58

Table 31

Enrollment of Black Students in Adams-Califano States by College Type: Private Institutions 1978

Business and Management

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	24,869	640	8,590	2,859	7,053	5,475	252
Alabama	1,769	31	795	514	85	344	-
Arkansas	562	-	-	3	46	326	187
Delaware	216	-	-	150	66	-	-
Florida	1,757	-	579	9	1,098	53	18
Georgia	1,644	-	1,021	84	79	460	-
Kentucky	687	-	-	210	104	373	-
Louisiana	671	-	496	-	113	62	-
Maryland	159	-	-	7	152	-	-
Mississippi	775	259	240	10	106	160	-
Missouri	624	-	-	-	624	-	-
N. Carolina	3,624	120	1,477	349	336	1,342	-
Ohio	2,852	-	321	963	1,565	3	-
Oklahoma	161	-	-	45	98	18	-
Pennsylvania	1,787	-	-	335	1,450	-	2
S. Carolina	2,351	116	841	-	253	1,141	-
Tennessee	2,124	-	705	8	218	1,193	-
Texas	1,461	37	895	4	480	-	45
Virginia	1,554	77	1,220	133	124	-	-
W. Virginia	91	-	-	35	56	-	-

Table 32

Enrollment of Black Students in Adams-Califano States
by College Type: Public Institutions 1976

Engineering

State	All	Black		White	
		2-Year	4-Year	2-Year	4-Year
TOTALS	8,953	-	3,121	1,974	3,858
Alabama	456	-	152	76	228
Arkansas	92	-	48	2	42
Delaware	68	-	18	21	29
Florida	308	-	184	-	124
Georgia	546	-	127	90	329
Kentucky	166	-	40	23	103
Louisiana	767	-	391	4	372
Maryland	92	-	5	-	87
Mississippi	478	-	391	12	75
Missouri	205	-	-	1	204
North Carolina	1,032	-	607	215	210
Ohio	800	-	-	422	378
Oklahoma	219	-	45	66	108
Pennsylvania	318	-	-	157	161
South Carolina	323	-	218	3	102
Tennessee	1,220	-	430	505	285
Texas	1,390	-	465	358	567
Virginia	375	-	-	17	358
West Virginia	98	-	-	2	96

Table 33

Enrollment of Black Students in Adams-Califa o States
by College Type: Public Institutions 1978

Engineering

State	All	2-Yea	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	10,919	397	3,414	1,619	5,258	148	83
Alabama	641	29	155	80	377	-	-
Arkansas	108	-	27	1	80	-	-
Delaware	129	-	34	53	42	-	-
Florida	391	-	173	-	218	-	-
Georgia	893	-	223	25	645	-	-
Kentucky	199	-	68	15	116	-	-
Louisiana	1,013	9	525	2	477	-	-
Maryland	192	-	38	-	154	-	-
Mississippi	112	-	4	25	83	-	-
Missouri	245	-	-	-	245	-	-
N. Carolina	1,054	-	751	-	303	-	-
Ohio	1,077	237	22	367	451	-	-
Oklahoma	175	-	10	42	123	-	-
Pennsylvania	514	106	-	111	261	36	-
S. Carolina	400	-	222	6	172	-	-
Tennessee	1,819	-	535	702	499	80	-
Texas	1,581	16	595	139	719	29	83
Virginia	285	-	32	50	203	-	-
W. Virginia	91	-	-	1	90	-	-

Table 34

Enrollment of Black Students in Adams-Califano States
by College Type: Private Institutions 1976

Engineering

State	All	Black		White		Other	
		2-Year	4-Year	2-Year	4-Year	2-Year	4-Year
TOTALS	1,734	3	692	18	981	27	13
Alabama	356	3	351	2	-	-	-
Arkansas	14	-	-	-	2	-	12
Delaware	2	-	-	-	2	-	-
Florida	168	-	-	1	167	-	-
Georgia	199	-	187	12	-	-	-
Kentucky	-	-	-	-	-	-	-
Louisiana	73	-	24	-	49	-	-
Maryland	13	-	-	-	13	-	-
Mississippi	27	-	-	-	-	27	-
Missouri	48	-	-	-	48	-	-
N. Carolina	63	-	40	1	22	-	-
Ohio	72	-	-	-	72	-	-
Oklahoma	5	-	-	1	4	-	-
Pennsylvania	509	-	-	1	507	-	1
S. Carolina	2	-	-	-	2	-	-
Tennessee	68	-	5	-	63	-	-
Texas	55	-	28	-	27	-	-
Virginia	58	-	57	-	1	-	-
W. Virginia	2	-	-	-	2	-	-

Table 35

Enrollment of Black Students in Adams-Califano States by College Type: Private Institutions 1978

Engineering

State	All	2-Year	4-Year	2-Year	4-Year
TOTALS	1,810	7	709	26	1,068
Alabama	324	-	321	3	-
Arkansas	5	-	-	1	4
Delaware	-	-	-	-	-
Florida	48	-	-	-	48
Georgia	217	-	217	-	-
Kentucky	1	-	-	-	1
Louisiana	50	-	13	-	37
Maryland	96	-	-	17	79
Mississippi	6	-	5	-	1
Missouri	88	-	-	-	88
North Carolina	40	-	29	3	8
Ohio	235	-	70	-	165
Oklahoma	7	-	-	2	5
Pennsylvania	364	-	-	-	364
South Carolina	-	-	-	-	-
Tennessee	42	-	-	-	42
Texas	243	7	12	-	224
Virginia	44	-	42	-	2
West Virginia	-	-	-	-	-

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